1.   Enhanced-surface-area spinal fusion apparatus adapted for use between an

2   upper vertebral body having an inferior vertebral endplate and a lower vertebral body

having a superior endplate, the distance between the endplates defining at least one

4   intervertebral spacing, the device comprising:

a biocompatible fusion device having a height which is greater than the

6   intervertebral spacing such that when implanted, at least a portion of the device

penetrates into one or both of the upper and lower vertebral bodies; and

8   a fastener configured to extend through the device and the vertebral body into

which the fusion device extends.

2.   The apparatus of claim 1, wherein the fusion device includes an aperture

2   adapted to receive the fastener.

3.   The apparatus of claim 1, wherein the fastener is treaded.

4.   The apparatus of claim 1, further including a guide for aligning the

2   insertion of the fastener.

5.   The apparatus of claim 4, wherein the guide is mountable on the fusion

2   device.

6.   The apparatus of claim 4, wherein guide may be used for drilling and

2 installation of the fastener.

7.   A method of promoting the fusion between upper and lower vertebra, each

2 vertebra having a body between superior and inferior endplates, the method comprising

the steps of:

4   removing a section of the upper vertebra, the lower vertebra, or both vertebra,

including a portion of its respective endplate;

6   installing the a fusion device between the vertebra so as to substantially consume

the removed sections; and

8   installing a fastener through the through the fusion device and each vertebra into

which the fusion device extends.

8.   The method of claim 7, further including the steps of:

2 temporarily installing an alignment guide; and

installing the fastener using the guide.

9.   The method of claim 8, wherein the alignment guide is mounted on the

2 fusion device.

10.   The method of claim 8, wherein the alignment guide is used for drilling

2   and orienting the fastener.